

fore wings and all but the costal space of the hind wings whitish; costa of both wings suffused with ochreous, with some black marks on the outer half of the costa of the fore wings and indications of a discal line; a curious angular mark beyond the middle, below the costa of the hind wings; body and legs whitish.

Expanse of wings 2 inches.

Durban, August 1900 (type in B. M.).

Lophopteryx uniformis, nov.

♀. Antennæ with the shafts brown, plumes ochreous; head, thorax, and fore wings dark chestnut-brown, with a pink tinge; antemedial and postmedial indistinct bands of pale lunular marks, straight and slightly oblique; cilia concolorous, with a pale basal band: hind wings grey, pale on the basal half; cilia grey, with a whitish basal band: abdomen whitish, tinged with pink, with thin grey segmental bands. Underside: fore wings uniform dull purplish brown, hind wings grey, no markings; body and legs grey.

Expanse of wings $2\frac{3}{10}$ inches.

Mashonaland (*Dobbie*) (type in B. M.).

XXV.—*Notes on Scorpions, with Descriptions of Two new Species.* By A. S. HIRST.

Family Buthidæ.

Babycurus somalicus, sp. n.

Colour brownish yellow or yellow; vesicle, hand, and lower surface of body paler; fingers of hand light brown; aculeus black, the basal portion excepted.

Carapace slightly trapezoidal, the frontal edge weakly concave; ocular tubercle granular, the groove between the eyes smooth. Distribution of granules apparently much as in *zambonelli*, the surface being covered with numerous granules, unequal in size and leaving several small spaces (devoid of granules), which are especially noticeable in the median part. Median eyes bordered on each side by an area furnished with minute granules. Median area of frontal region with an aggregation of large granules.

Abdomen. Tergites minutely granular in their anterior parts, posteriorly provided with large shining granules in

addition to the minute ones. Keels granular, incomplete anteriorly. Third and fourth sternites with sparse granules laterally; fifth sternite granular and provided with four granular keels.

Tail. Keels distinct and granular in all segments. First segment with ten keels, segments 2-4 with eight, fifth segment with five. Dorsal surfaces concave in segments 1-4; fifth caudal segment slightly convex dorsally and provided with a narrow and shallow median groove; posterior portion of this last segment narrowed, but exceeding the vesicle in breadth. Intercarinal spaces minutely granular; the granules very sparse on the dorsal surfaces of the first four segments; fifth caudal segment more strongly granular. Vesicle hairy, granules absent; spine under aculeus laterally compressed and terminating in a little knob.

Palp. Hand with scattered granules on the inner edge, outer and inner keels of the dorsal surface minutely but distinctly granular; finger-keel granular only in that portion which is situated on the hand itself. Movable finger provided with eight series of granules exclusive of the short apical series, six series ending on the outer side in two large granules, the last pair of granules situated at the base of the prebasal series. Upper surface of the femur of the palp minutely and densely granular.

Pectinal teeth 19-20 in number.

Measurements in mm. Length of cephalothorax 5.5, of tail (vesicle excl.) 23, of movable finger 6, of hand-back 3.6; breadth of hand 2.25, of tibia 1.75; total length 47.

Hab. A ♀ specimen (the type) labelled "Berbera and Durbar, Somaliland, sea-level to 400 ft.," and a second from the Wagar Mountains behind Berbera, 3000-4000 ft. The specimens were collected by Mr. G. W. Bury.

Remarks. This species is closely allied to *zambonelli*, Borelli, from which it apparently differs in the granular keels of the manus, the little knob terminating the spine under the aculeus, the distinct keels of the last caudal segment, the minute granules of the upper surface of the femur of the palp, and in the fact that the movable finger is provided externally with two large granules situated at the base of the prebasal series of granules.

Genus ISOMETROIDES, Keys.

There are two species of this genus in the collection of the British Museum and each is represented by a single specimen. I believe them to be the two described species

I. angusticaudus, Keys., and *I. vescus*, Karsch; I have not seen the typical specimens of these species, however. The more important differences are given below.

Isometroides angusticaudus, Keys.

Isometroides angusticaudus, Keyserling, Arach. Austral. vol. ii. p. 19 (1884-89); Kraepelin, Das Tierreich, "Scorpiones et Pedipalpi," p. 40 (1899).

Fourth caudal segment with eight granular and well-marked keels; surface granular, the granules larger than in the preceding segments, with few punctures. Surface of fifth caudal segment with numerous punctures, rugulose. Pectinal teeth twenty-three in number. Measurements in mm.: length of tail (vesicle excl.) 23, of fifth caudal segment 6.5; breadth of fifth caudal segment 3.5; total length 41.

Hab. A single example from Port Lincoln, Australia.

Isometroides vescus, Karsch.

Isometrus vescus, Karsch, SB. Ges. naturf. Berlin, p. 56 (1880).

Isometroides vescus, Keyserling, Arach. Austral. vol. ii. p. 17 (1884-89); Kraepelin, Das Tierreich, "Scorpiones et Pedipalpi," p. 40 (1899).

Fourth caudal segment provided with eight indistinct keels; devoid of granules and with distinct punctures. Fifth caudal segment smooth and shiny, with numerous punctures. Pectinal teeth 24-25 in number. Measurements in mm.: length of tail (vesicle excl.) 21.5, of last caudal segment 6; total length 39; breadth of last caudal segment 2.5.

Hab. Kalgorlie near Coolgardie, W. Australia.

Tityus Kraepelini, Pocock,

Tityus Kraepelini, Pocock, Ann. & Mag. Nat. Hist. (7) x. p. 379 (1902).

The name *Kraepelini* being preoccupied*, I propose that of *Pococki* for this species.

Hab. Abundant at Merida, also found at Chama, Venezuela.

Family Scorpionidæ.

Diplocentrus nitidus, sp. n.

Colour. A very dark brown, manus paler, legs and under surface of a much paler colour.

* Borelli, Boll. Mus. Torino, xiv. no. 345 (1899).

Carapace minutely punctured, more sparsely so on the raised portions; surface smooth and polished, devoid of granules. Median groove present in front of the eyes. Anterior border with a deep bay.

Abdomen. Tergites smooth and polished, minutely punctured; provided on their hinder edges with a row of granules, which is incomplete in the median line. Last tergite with large isolated granules laterally. Sternites smooth and polished, minutely punctured; the punctures more distinct on the last sternite, which is furnished with four smooth keels.

Tail stout; superior dorsal keels of the first four segments formed by a few fairly large granules, the posterior granule of each series enlarged. Ventral keels much as in *antillanus*, smooth, and each bearing a few setiferous depressions. Accessory lateral keels ill-defined. Vesicle very stout, its surface minutely punctured and devoid of granules.

Pectines with nine teeth.

Feet with minute punctures, tarsi angular and with but few punctures; tarsi of third and fourth legs provided with six spines on the inner edge and with a proximal crescent of four granules, externally with 6-7 spines.

Manus narrow, lobe reduced; dorsal surface smooth and keelless, less densely punctured than is the case in *antillanus* and with frequent unpunctured spaces which give it a reticulate appearance.

Measurements in mm. Length of carapace 5, of tail (including vesicle) 20, of first two segments of tail 5.5, of last segment of tail 4.75, of movable digit of hand 5.5; total length 36; breadth of last segment of tail 2.6, of tibia of palp 2.25, of vesicle 3; greatest breadth of hand 4; length of vesicle (aculeus excl.) about 4.

Hab. San Ramon, Rio Wanks, about 185 miles above Cape Gracias, Nicaragua. A single specimen collected by Mr. G. Palmer in the month of July 1905.

Remarks. Allied to *antillanus*, Pocock, from which it may be distinguished by the weakly lobed, keelless hands, the dorsal surfaces of which are punctured in a reticulate fashion, and also by the stout tail and vesicle, the coarse and less numerous granules of the superior dorsal keels of the tail, and the deep bay of the anterior margin of the cephalothorax.